

Biological Resources Management

Alternatives for the biological resources of the LHFO planning area are described in this section. The four main areas of consideration are: vegetation management, fish and wildlife habitat management, special status species management, and invasive or noxious species management. Tables 2-28, 2-29, and 2-30 below contain alternatives for the management of the natural community types and for the species that are currently present within the planning area. All of the federally listed threatened, endangered, or candidate species listed in Table 3-3, and all of the species of concern (BLM sensitive and state designated species) listed in Table 3-4 are considered "Priority Wildlife."

Conservation measures applicable to the LHFO planning area were derived from the Lower Colorado River Multi-Species Conservation Plan (MSCP). The plan represents a comprehensive species conservation approach to both federal actions and non-federal activities on the lower Colorado River. This unique conservation partnership includes federal, state, tribal participants and other stakeholders in Colorado River waters. In addition, this program represents a unique partnership among a number of agencies within the U.S. Department of the Interior. Department of the Interior Secretary Norton also directed all participating agencies within the Department of the Interior to utilize their authorities in furtherance of this conservation program to the fullest extent allowed by law. Rather than undertaking piecemeal, action-by-action activities in compliance with the Endangered Species Act of 1973 (ESA), the Lower Colorado River Multi-Species Conservation Plan is designed as a comprehensive approach to species conservation. All participating departmental officials are directed to cooperate and implement such agreements to achieve the important species conservation actions identified within the MSCP.

For additional Land Use Allocations, refer to the "Mineral Resources" section of this chapter and to the Land Health Standards at the beginning of this chapter. See the "Special Area Designations" section of this chapter for proposed Wild and Scenic Rivers. See the "Lands and Realty Program" section of this chapter for additional Management Actions related to utility corridors and telecommunication sites.

Vegetation Management

The LHFO Strategy for Resource Management is a series of management activities used to ensure that all resource activities meet the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (Standards and Guidelines) that are discussed in the "Continuing Management Guidance" section of this chapter. Management practices would promote sufficient vegetation across the landscape to maintain watershed stability, provide forage, improve or restore riparian-wetland functions, enhance groundwater recharge, and satisfy state water quality standards appropriate to climate and landform. LHFO would continue to coordinate with cooperating agencies to find opportunities for enhancement of vegetation health, particularly in riparian areas.

Priority plant species for the LHFO are:

- Mesquite all species (*Prosopis* sp.)
- Smoketree (*Psoralea argophylla*)
- Ironwood (*Olneya tesota*)
- Saguaro (*Carnegiea gigantea*)
- Joshua tree (*Yucca brevifolia*)
- Singleleaf pinyon pine (*Pinus monophylla*)
- Arizona rosewood (*Vauquelinia californica*)
- Gooddings willow (*Salix gooddingii*)
- Nettleleaf hackberry (*Celtis reticulata*)
- Cottonwood (*Populus fremontii*)
- Quailbush (*Atriplex lentiformis*)
- Scaly-stemmed sand plant (*Pholisma arenaria*)

Fish and Wildlife Habitat Management

The objective is to restore, enhance, or maintain habitats and to mitigate for the loss of habitats to sustain or increase fish and wildlife populations. Native species diversity, natural distribution, and abundance of fish and wildlife species in the LHFO planning area are priorities, and BLM will cooperate with state and federal authorities to perpetuate a fully functional ecosystem through employment of the following processes:

- Identify and seek remedy for water quality limitations for fish production.
- Manage for diverse, sustainable habitats.
- Allow for a mosaic of habitats.
- Minimize habitat fragmentation.
- Minimize restrictions to wildlife movement.
- Implement conservation and recovery plans where applicable.
- In cooperation with other agencies, reestablish, extend the historic range of, and/or supplement populations when determined necessary to sustain local species populations
- Manage for a vegetative community that meets the needs of wildlife.
- Support adaptive management, based on the best available science.
- Allow for wildlife waters, as needed to achieve state or federal wildlife agency strategic planning objectives.
- Create travel corridors to minimize restrictions to wildlife movement.

- Support research efforts.
- Provide aquatic habitat where limited.

Please note that the term “priority wildlife habitat area,” an allocation specified in the 1987 *Yuma District Resource Management Plan* (YRMP), has been updated by BLM. The geographical areas referred to in that plan are now termed Wildlife Habitat Management Areas, or WHAs.

Special Status Species Management

Special status species includes federally listed endangered, threatened, proposed, and candidate species, and designated or proposed critical habitat; species of concern managed under Conservation Agreements or Management Plans; state-listed species; and BLM-sensitive species.

ESA, as amended, is the authority to conserve endangered or threatened species on public lands. Section 4(f) of ESA directs the Secretary of the Interior to develop and implement recovery plans for the conservation and survival of endangered species. Section 7(a)(2) of ESA states, “Each federal agency shall, in consultation with and with the assistance of the Secretary of the Interior, ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical.” Section 7(a)(1) of ESA states, “All...federal agencies shall utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species.” Information on special status species known to occur within the LHFO planning area is provided in Appendix J.

BLM will actively seek opportunities to conserve and improve special status species habitats and habitats for native wildlife.

Invasive or Noxious Species Management

Invasive or noxious species collectively constitute one of the gravest threats to the biodiversity of BLM lands. Two critical components of managing these species are (1) identifying those species that threaten biodiversity and other ecological functions and values, and (2) prioritizing species for management efforts, which must be based, at least in part, on the ecological impacts imparted by these invaders. This section proposes alternatives for managing this threat within the LHFO planning area.

Table 2-28. Biological Resource Management–Desired Future Conditions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not specifically addressed in previous plans	Conserve and protect Migratory Bird species (see Appendix J Table J-7) and their habitats, LHFO will follow the guidance provided within the Migratory Bird Executive Order 13186, Arizona Partners in Flight Bird Conservation Plan, Partners in Flight Land Conservation Plan, U.S. Fish and Wildlife Service (USFWS) North American Waterfowl Management Plan, and MSCP.			
Not specifically addressed in previous plans	No net loss of quantity or quality of priority species and/or priority habitats would occur on the LHFO. (See priority wildlife and priority plant species listed above).			
Not specifically addressed in previous plans	Conserve habitat and work toward the recovery of threatened and endangered (T&E) species, as well as reduce the likelihood of additional species listings under the ESA and California ESA (MSCP).			
Not specifically addressed in previous plans	Sustainable populations of native species currently absent from the area, and those species whose genetic pools require augmentation, would be achieved.			
<i>The following decision is derived from the 1987 YRMP and will be applicable to the lands covered by that plan:</i>	Soils would maintain or increase biological productivity and would exhibit no more than natural erosion rates.			
Soils would be managed to maintain biological productivity and to minimize erosion.				
<i>The following decision is derived from the 1987 YRMP and is applicable to the lands covered by that plan:</i>	Wildlife habitat projects would be designed to maintain, restore and improve species biodiversity.			
Wildlife habitat improvement projects would be implemented where necessary to stabilize or improve unsatisfactory or declining wildlife habitat condition. These projects would be identified through cooperative management plans (under the Sikes Act) or coordinated resource management activity plans (e.g., AGFD, CDFG, USFWS plans etc).				

Table 2-28. Biological Resource Management–Desired Future Conditions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not specifically addressed in previous plans	Ecosystems would be restored and supported in conjunction with vegetation, aquatic, and terrestrial wildlife habitat requirements.			
Not specifically addressed in previous plans	Native plant communities (Appendix J, Table J-1) would be maintained appropriate to climate and landform to: <ul style="list-style-type: none"> provide watershed stability, provide adequate forage for native wildlife species, improve or restore riparian-wetland functions, enhance groundwater recharge, and satisfy state water quality standards. 			
Not specifically addressed in previous plans	Wildlife movement corridors would be maintained for biotic diversity.			
<p><i>The following decision is derived from the 1987 YRMP and will be applicable to the entire planning area:</i></p> <p>The Yuma District will discourage the introduction of "exotic" species on public lands.</p>	Establishment of invasive and noxious species would diminish throughout the planning area and many would begin to decline in aerial extent, density and cover.			
Not specifically addressed in previous plans	<p>Natural springs, wetlands, seeps and streams would be conserved, enhanced, and restored.</p> <hr/> <p>BLM would manage all wildlife habitats with the objective to conserve native species for sustainable public benefits.</p> <hr/> <p>Integrity of roost sites, lek sites and maternity sites within caves and abandoned mine lands for bat species would be maintained. Food and water sources would be conserved and protected.</p>			
Not specifically addressed in previous plans	Sufficient quality and quantity of riparian areas would be maintained to provide roosting and potential nesting trees and adequate prey base for riparian obligate species such as bald eagle, willow flycatcher, western yellow-billed cuckoo, etc.			

Table 2-28. Biological Resource Management–Desired Future Conditions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<p><i>The following decision is derived from the KRMP and is applicable only to the lands covered by that plan:</i></p> <p>Management would maintain instream flows to support habitat to supply aquatic, terrestrial, and threatened and endangered wildlife and dependent riparian vegetation on public lands in the Bill Williams River through securing and protecting water rights for wildlife habitat.</p>	<p>Management would maintain instream flows to support habitat to supply aquatic, terrestrial, and threatened and endangered wildlife and dependent riparian vegetation on public lands in the Bill Williams River through securing and protecting water rights for wildlife habitat.</p>			

Table 2-29. Biological Resource Management–Land Use Allocations

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<p><i>The following decision is derived from the 1987 YRMP and is applicable to the lands covered by that plan.</i></p> <p>Approximately 520,220 acres of public lands would be allocated for management as Category I, II, or III desert tortoise habitat.</p>	<p>Approximately 1,017,759 acres of public lands would be allocated for management as Category I, II, or III Sonoran desert tortoise and Mojave desert tortoise habitat. See Table 2-57 below and Map 2-39</p> <ul style="list-style-type: none"> ▪ Category I - 108,499 acres ▪ Category II - 286,388 acres ▪ Category III - 573,767 acres ▪ Mojave - 49,105 acres 			
<p><i>The following decision is derived from the 1995 KRMP and is applicable to the lands covered by that plan:</i></p> <p>In Category I and II desert tortoise habitat, only range improvements that will not conflict with tortoise populations would be allowed.</p>	<p>In Category I and II desert tortoise habitat, only range improvements that will not conflict with tortoise populations would be allowed.</p>			
<p>Not specifically addressed in previous plans</p>	<p>Within WHAs for special status species uses that are in conflict with restoration and/or maintenance of these habitats would be restricted as determined by NEPA process (see Map 2-40).</p>			
<p><i>The following decision is derived from the 1987 YRMP and is applicable to the lands covered by that plan:</i></p> <p>Off-highway vehicle use in priority habitat areas is limited to existing roads and trails.</p>	<p>Within WHAs established for special status species, specific routes or portions of specific routes would be closed to vehicular traffic during the seasons when the habitats are being utilized.</p>	<p>Within WHAs established for special status species, specific routes or portions of specific routes would be closed to vehicular traffic during the seasons when the habitats are being utilized when usage would adversely impact the species.</p>	<p>Route designation would determine the closures and limitation on routes in relation to WHAs. (See “Transportation and Public Access.”)</p>	
<p><i>The following decision is derived from the KRMP and is applicable only to those lands covered by that plan:</i></p> <p>Restrict development of campgrounds to</p>	<p>New facilities and campgrounds would be located outside the 100-year floodplain</p>	<p>New facilities and campgrounds would be located at an appropriate distance</p>	<p>New incompatible facilities and campgrounds would be located outside</p>	<p>New facilities and campgrounds would be located away from riparian wetland areas</p>

Table 2-29. Biological Resource Management–Land Use Allocations

areas outside of riparian zones and the 100-year floodplain.	and not near riparian-wetland areas. Existing facilities would be used in a way that does not conflict with riparian-wetland functions or relocated when incompatible with riparian-wetland functions. The distance “near” depends on species utilizing area.	away from riparian-wetland areas if they conflict with achieving or maintaining riparian-wetland function.	existing riparian-wetland areas. Existing facilities would be used in a way that is compatible with riparian-wetland functions or relocated/modified when incompatible with riparian-wetland functions.	if they were incompatible with achieving or maintaining riparian wetland function.
<p><i>The following decision is derived from the KRMP and is applicable only to those lands covered that plan:</i></p> <p>Limit off-highway vehicle use in riparian areas to designated road and trails (Three Rivers ACEC). <i>The following decision is derived from the 1987 YRMP and is applicable only to the lands covered by that plan:</i></p> <p>In the Bill Williams Riparian Management Area, no additional mineral material removal permits or utility ROWs would be authorized. OHV use would continue to be limited to existing roads and trails.</p>	In addition to Alternative 1: LHFO would protect all woodlands, including mesquite bosques, by allowing no wood collection and excluding all motorized vehicular use (Map 2-41).	LHFO would designate OHV routes and/or ROWs into woodlands, including mesquite bosques.	LHFO would protect all woodlands, including mesquite bosques, by limiting wood collection to authorized users (see Map 2-41).	
<p><i>The following decision is derived from the 1983 LGNMFP and is applicable to the lands covered by that plan:</i></p> <p>Allocate additional forage to big game species as forage production increases, so that carrying capacities can be increased to those listed in this objective and decrease</p>	This decision is not carried forward. See “Rangeland Management/Grazing” section.			

Table 2-29. Biological Resource Management–Land Use Allocations

browse utilization by 10% in the Loma Linda and Lamberson allotments.

The following decision is derived from the 1995 KRMP and is applicable only to the lands covered by that plan:

Wildlife movement corridors and lands between mountains in southern Mohave County would be established

A total of 15 wildlife movement corridors identified on the map would be managed to enable free wildlife movement (see Map 2-42).

The Buck Mountain Wash wildlife movement corridor would continue to be managed to protect free wildlife movement (see Map 2-42).

Six wildlife movement corridors would be allocated, the following corridors identified on Map 2-42: Corridors 1, 2, 5, 7, 13, and 14.

The following decisions are derived from the 1987 YRMP and are applicable to the lands covered by that plan:

Roads traversing bighorn sheep lambing grounds (11,100 acres) are closed during the lambing season from January 1 to June 30. Exceptions to this seasonal closure may be made through applicable Federal regulations for rights-of-way, mining, and off-road vehicle uses

Protect bighorn sheep lambing areas and a 2-mile buffer zone (20,000 acres) in the Little Harquahala Mountains and Harquahala Mountains from habitat and behavioral disturbances created by: a) land disposal; b) excess fencing; c) structure building; d) land clearing and wood cutting; e) mining activity between December 15 and April 15 (within the framework of the 3809 regulations); f) road building; g) intense recreational use and development; h) rights-of-way; and i) utilization of key browse in excess of 40%.

In any identified desert bighorn sheep lambing grounds, no motorized vehicles would be allowed off paved roads from January 1 through June 30. This restriction would not include authorized agency service vehicles for authorized ROWs or for ownership access to private land (with the exception of the Aubrey Hills area, which has a yearlong closure) (see Map 2-43)

In any desert bighorn sheep lambing grounds, motorized vehicles would be allowed on existing roads (with the exception of the Aubrey Hills.) (See Map 2-43.)

In any identified desert bighorn sheep lambing grounds, no motorized vehicles would be allowed off paved roads from January 1 through June 30. This restriction would not include authorized agency service vehicles for authorized ROWs or for ownership access to private land (with the exception of the Aubrey Hills area, which has a yearlong closure) (see Map 2-43)

Exception: The Little Harquahala lambing grounds would not be seasonally closed to vehicles (see Map 2-43).

Desert bighorn sheep lambing grounds would be allocated (Map 2-43) for special seasonal management between January 1 and June 30 (closed though the end of June to protect young lambs) with the exception of the Lake Havasu Aubrey Hills area, which has a yearlong closure. The Little Harquahala lambing grounds would not be seasonally closed to vehicles (see “Transportation and Public Access”).

Table 2-29. Biological Resource Management–Land Use Allocations

Not specifically addressed in previous plans	No livestock use (including sheep and goats) would be allowed for weed reduction.	Livestock use (including sheep and goats) would be allowed where feasible for weed reduction.	Domestic or feral sheep or goats would not be allowed on public lands within 9 miles of desert bighorn habitat.
<p><i>The following decisions are derived from the 1987 YRMP and is applicable only to the lands covered by that plan:</i></p> <p>Wildlife habitat would be a priority consideration for the 243,100 acres in the LHFO planning area. Areas with important wildlife values will be referred to as WHAs.</p> <p>Bighorn sheep yearlong use areas (163,200 acres) would continue to be managed as priority wildlife habitat areas.</p> <p>All of the remaining riparian areas administered by LHFO along the Colorado and Bill Williams Rivers (approximately 5,000 acres) would be managed as WHAs. The Riparian Management Area (see Map 2-44).</p> <p>Riparian areas around springs would also be managed as priority habitat in order to maintain their high value for wildlife. Allowable uses within the Bill Williams Riparian Management Area are limited to compatible activities or uses, which preserve or enhance the area's recognized values. Improvements are limited to those compatible with the natural resources and those permitted by mining laws.</p>	<p>737,127 acres in the LHFO planning area would be cooperatively managed as WHAs with state and federal wildlife agencies. See Table 2-2 and Map 2-40. This land is comprised of (some of these areas overlap leading to the smaller total acreage);</p> <ul style="list-style-type: none"> ▪ Riparian Habitat, Springs & Seeps (6,126acres) ▪ Bighorn Sheep Habitat (562,022acres) ▪ Mojave & Sonoran Desert Tortoise Habitat (I,II) (440,599acres) ▪ Wildlife Corridors (91,835acres) ▪ T&E Species Habitat 	<p>WHAs would not be established.</p>	<p>737,127 acres in the LHFO planning area would be cooperatively managed as WHAs with state and federal wildlife agencies. See Table 2-2 and Map 2-40. This land is comprised of (some of these areas overlap leading to the smaller total acreage);</p> <ul style="list-style-type: none"> ▪ Riparian Habitat, Springs & Seeps (6,126acres) ▪ Bighorn Sheep Habitat (562,022acres) ▪ Mojave & Sonoran Desert Tortoise Habitat (I,II) (440,599acres) ▪ Wildlife Corridors (91,835acres) ▪ T&E Species Habitat
<p><i>The following decision is derived from the 1987 YRMP and is applicable to the lands</i></p>	<p>This allocation was not carried forward.</p>		

Table 2-29. Biological Resource Management—Land Use Allocations

covered by that plan:

Allowable uses on WHAs would include compatible activities or those uses whose impacts would be mitigated to preserve or enhance wildlife values

The following decision is derived from the 1987 YRMP and is applicable to the lands covered by that plan:

Improvements on priority wildlife areas would be restricted to those that are compatible with wildlife habitat or cultural resources and those required by mining.

Allowable uses in WHAs would include activities that benefit wildlife habitat.

New developments on WHAs would be compatible with wildlife habitat to the extent possible.

New developments on WHAs would be compatible with wildlife habitat to the extent possible to preserve, maintain, and/or enhance plant and wildlife diversity.

The following decision is derived from the 1995 KRMP and is applicable to the lands covered by that plan:

Domestic or feral sheep or goats would not be allowed on public lands within 9 miles of desert bighorn habitat.

Domestic or feral sheep or goats would not be allowed on public lands within 9 miles of desert bighorn habitat.

The following decision is derived from the 1987 YRMP and is applicable to the lands covered by that plan:

Domestic and commercial collection or sales of fuelwood for home heating purposes would not be authorized.

Domestic and commercial collection or sales of fuel wood for home heating purposes would not be authorized

Table 2-29. Biological Resource Management–Land Use Allocations

Not specifically addressed in previous plans	<p>For the protection of bighorn sheep habitat and other natural values, no motorized vehicles would be allowed within the Lake Havasu Aubrey Hills Area. This restriction does not include authorized vehicles for administrative purposes, authorized ROWs, lands under R&PP lease/patent, and ownership access to private land.</p>
	<p>BLM, in cooperation with other authorities, would allocate 75 acres at the Colorado River Nature Center, Three Mile Lake, and Beale Slough to be used for spawning and rearing habitat for special status fish species (see Map 2-45).</p>
	<p>Spawning, nesting, brood rearing, or larval fish rearing habitat used by special status species would be identified as Fish Habitat Areas (FHAs). Incompatible uses or development, modification, and/or negative impacts where practicable would not be allowed.</p>
	<p>An area of 7 acres of Lake Havasu bottom would receive organic brush maintenance each year to replace woody habitat improvements that have decomposed over the previous 10-year period. This process would occur only in areas that already contain fish habitat improvements.</p>
	<p>Approximately 875 acres in 42 separate locations in Lake Havasu would be designated as FHAs.</p>
	<p>The facility known as Partners Point (see Map 2-45) would be retained and maintained by BLM and cooperating parties to facilitate aquatic habitat management and other BLM management requirements.</p>

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Conservation Measures Common to All Alternatives				
Migratory Bird Executive Order 13186, Arizona Partners in Flight Bird Conservation Plan, Partners in Flight Land Conservation Plan, USFWS North American Waterfowl Management Plan, other bird Conservation Plans and MSCP.				
<ul style="list-style-type: none"> ▪ To the extent practicable, avoid, minimize impacts and/or take of migratory birds and their habitat. ▪ During construction and tree pruning, identify and avoid all migratory bird nests. ▪ Conduct research to identify important migratory bird habitat and restore/enhance that identified habitat. ▪ Ensure that important habitats are managed, maintained, increased and improved to attain the vegetation structure plant species diversity and density to provide diverse habitat of quality and quantity (see Maps 2-40, 2-44 and 2-45). ▪ Mitigate adverse effects on migratory species habitat ▪ Replace important habitat that is lost due to BLM permitted activities. ▪ Initiate, collaborate, and/or support projects related to conservation measures set forth in the above plans, ▪ Identify potential bird conservation projects and seek grant funding. 				
Conservation tasks for the Western Yellow-billed Cuckoo.				
<ul style="list-style-type: none"> ▪ Increase enforcement of access into restricted areas. ▪ Avoid intense and repeated human disturbance from nesting areas especially from 20 May through 1 September. ▪ Increase cooperation between state and federal agencies and private organizations regarding Yellow-billed Cuckoo habitat. ▪ Establish riparian corridors and "island" habitats to allow natural dispersal and recolonization of historic habitats. ▪ Establish areas near existing occupied habitat for restoration, before focusing on areas further away. 				
Recovery tasks found in the <i>Mojave Desert Tortoise Recovery Plan and any revised plans</i> . When the recovery plan is revised and updated, new conservation measures applicable to the LHFO would be incorporated into the LHFO RMP.				
<ul style="list-style-type: none"> ▪ To the extent possible avoid and minimize impacts on the Mojave Desert Tortoise (MSCP) ▪ Protect existing occupied habitat (MSCP). ▪ No disposal of known occupied habitat ▪ Avoid impacts on individuals and their burrows. ▪ Develop increased awareness of tortoise resources on the public lands. ▪ Assure the all personnel working within desert tortoise habitat on public lands are knowledgeable about the tortoise and its resource. 				

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<ul style="list-style-type: none"> Develop a strong awareness of tortoises and their habitats, particularly in the BLM planning, environmental assessment and budget processes. Complete and maintain a continuing inventory and monitoring program of tortoise populations and habitats to assist in making management decisions, including habitat categorization. Include monitoring provisions specific to decisions affecting the desert tortoise. Maintain a log of Environmental Assessments containing stipulations pertaining to the desert tortoise, for express purpose of tracking compliance and effectiveness of the stipulations. The monitoring of these stipulations and recommendations for improvement will be documented in the log. Develop and maintain a monitoring program specifically for land -use activities that adversely affect tortoise habitats for use in analyzing and responding to the cumulative impacts of land-use decisions on tortoise habitats. Comply with Section 7 (a) of the Endangered Species Act by caring out positive actions promoting and the recovery of listed and proposed populations, and by assuring that BLM actions do not jeopardize the continued existence of the desert tortoise (MSCP). Maintain stable, viable populations, and protect existing tortoise habitat values and increased populations were possible. Retain all-natural shelter sites, caliche caves, or similar features used by tortoises for sheltering and maintain unfragmented habitat. 				
<p>Conservation measures found in the Sonoran Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan. (November 1988) and subsequent plans.</p>				
<ul style="list-style-type: none"> No net loss of Category I and II Sonoran desert tortoise habitat In Category I and II Sonoran desert tortoise habitat, only range improvements that will not conflict with tortoise populations would be allowed. (See Map 2-39) Implement and/or support desert tortoise research and studies, especially relating to management issues and overall population viability. Manage tortoise habitats using an ecosystem management approach with emphasis on maintaining or restoring natural biological diversity. Institute a "no net loss" in quantity or quality of desert tortoise habitat especially in Category I and II habitat. Implement conservation strategies and recommendations in the Sonoran Desert Tortoise Conservation Strategy (in prep) by the Arizona Interagency Desert Tortoise Team. Recognize Key Habitat Areas designated by the Arizona Interagency Desert Tortoise Team and institute Management Actions that protect or enhance the viability of these areas. Recognize that Category III habitats may serve as important buffer and dispersal zones and provide genetic linkage to core population areas. Incorporate these areas into long-term and ecosystem management and planning. Develop and implement land acquisitions and disposals strategies that use the best available information to provide habitat to 				

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<p>sustain viable populations of tortoises throughout their range.</p> <ul style="list-style-type: none"> Enhance and restore habitat corridors that connect significant desert tortoise subpopulations. Coordinate and support efforts from AGFD and other agencies in the planning and implementation of strategies designed for long-term survival of tortoise populations. Incorporate information from current and future research and studies into short-term and long-term planning, especially new information on genetics, dispersal corridors, connectivity, and population viability. When possible employ a precautionary principle in tortoise habitat management using the best available information until specific and site specific research can be conducted. Recognize the importance of the tortoise as a keystone species, which via its burrowing systems provides habitats for many other species. Habitat management categories and boundaries would be revised as new scientific population information becomes available. BLM would address and include restoration measures in decision documents to offset the loss of quality or quantity of Category III tortoise habitat. In Category I and II tortoise habitats, all motorized and non-motorized competitive events would be restricted to avoid activities between March 31 and October 15; all other use requests would be reviewed on a case-by-case basis. Compensation for conflicts may be required to achieve protection of quantity or quality of desert tortoise habitat. Desert tortoise Management Actions appropriate to each category goal would be applied to habitat areas, consistent with the current desert tortoise management plan. 				
Recovery tasks found in the <i>Bonytail Chub Recovery Plan</i> and subsequent plans.				
<ul style="list-style-type: none"> Provide and protect adequate habitat and sufficient range for all life stages of endangered fish to support survival of recovering populations. Investigate habitat requirements for all life stages and provide those habitats where feasible. Provide leadership with other agencies to ensure adequate protection from over-utilization. Minimize the risk of hazardous materials spills and/or releases by BLM approved activities. Provide leadership to cooperatively quantify water-quality problems and affect long-term improvement. Provide for the long-term management and protection of populations and their habitats beyond delisting (i.e., conservation plans). Minimize the threats and adverse impacts to the bonytail chub and their habitats. Participate in an education program to increase public awareness of this species. Participate with other agencies in the recovery, conservation, research, management and monitoring activities (see Map 2-45). 				

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Recovery tasks found in the <i>Razorback Sucker Recovery Plan</i> and subsequent plans.				
<ul style="list-style-type: none"> Provide and protect adequate habitat and sufficient range for all life stages of endangered fish to support survival of recovering populations. Investigate habitat requirements for all life stages and provide those habitats where feasible. Provide leadership with other agencies to ensure adequate protection from over-utilization. Minimize the risk of hazardous materials spills and/or releases by BLM approved activities. Provide leadership to cooperatively quantify water-quality problems and affect long- term improvement. Provide for the long-term management and protection of populations and their habitats beyond delisting (i.e., conservation plans). Minimize the threats and adverse impacts to the Razorback Sucker and their habitats. Participate in an education program to increase public awareness of this species Participate with other agencies in the recovery, conservation, research, management and monitoring activities (see Map 2-45). 				
Tasks found in Executive Order 12962 of June 7, 1995,				
<ul style="list-style-type: none"> Identify recreational fishing opportunities that are limited by water quality and habitat degradation and promote restoration to support viable, healthy, and, where feasible, recreational fisheries. Provide access to and promote awareness of opportunities for the public participation and enjoyment of U.S. recreational fishery resources. Support outreach programs designed to stimulate angler participation in the conservation and restoration of aquatic systems. Aggressively work with all federal agencies to identify and minimized conflicts between recreational fisheries and their respective responsibilities under the Endangered Species Act of 1973. 				
Recovery tasks found in the Southwestern <i>Bald Eagle Recovery Plan</i> 1982 and subsequent plans				
<ul style="list-style-type: none"> Achieve habitat quality and quantity of riparian areas within the foraging range of bald eagles to maintain nesting and wintering birds within the Bill Williams and Colorado River drainages (see Maps 2-44 and 2-45). Coordinate with the Southwestern Bald Eagle Management Committee to continue implementation of the guidelines set forth in the Arizona Conservation Assessment and Strategy Plan for the bald eagle in Arizona. Continue to support federal and state agencies efforts to protect and enhance breeding areas on all BLM lands. 				
Recovery tasks found in the Yuma Clapper Rail (YCR) Recovery Plan and subsequent plans. (USFWS 1983 and MSCP).				
<ul style="list-style-type: none"> Sample every five years all known regions where YCR populations are found using standardized techniques and develop and implement a plan of local population surveys every year. Preserve and maintain breeding habitat to support populations of YCR within LHFO. 				

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<ul style="list-style-type: none"> Preserve winter habitat of the YCR within the LHFO. Carry out a program of public conservation, education, and planning directed towards preservation of rail habitat. Maintain existing important YCR habitat areas. Avoid, minimize and/or mitigate to the extent possible disturbance in occupied territories during the breeding and molting seasons (March 15-September 1) (see Maps 2-44 and 2-45 for areas of possible habitat). 				
Recovery tasks found in the Southwestern Willow Flycatcher Recovery Plan and subsequent plans. (USFWS 2001 and MSCP).				
<ul style="list-style-type: none"> Continue to survey, monitor, and conduct research to improve the recovery of the Southwestern Willow Flycatcher. Carry out a program of public conservation, education, and planning directed towards preservation of rail habitat. Assure implementation of laws, policies and agreements that benefit the flycatcher To the extent practical, avoid and minimize disturbance of the Southwestern Willow Flycatcher during the breeding season. Riparian areas that could physically support Southwestern willow flycatcher habitats would be managed, maintained, increased, and improved to attain the vegetation structure plant species diversity, density, and canopy cover to constitute suitable habitat (see Maps 2-44 and 2-45 for habitat). 				
Conservation Measures Specific to Alternatives				
Not specifically addressed in previous plans	The use of certified weed-free hay would be required in all areas.	To help stop the spread of invasive or noxious species, BLM would provide educational material to equestrian users on the use of weed-free hay/palletized feed. BLM would encourage the use of weed-free feed for stock in WAs, WSAs, and areas managed for wilderness characteristics, and WHAs.	BLM would require the use of certified weed-free and domestic sheep free forage for all stock in WAs, WSAs, lands allocated for wilderness characteristics, and WHAs. BLM would encourage the use of certified weed-free and domestic sheep free for all other public lands within LHFO.	

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not specifically addressed in previous plans	Only native species would be allowed in landscaping designs and for use in rehabilitation of BLM-managed lands.	Only native vegetation would be utilized when possible in all landscaping designs. Concessions would be allowed to plant any drought-resistant species in their landscaping designs.	When possible, only native vegetation would be utilized in all landscaping designs.	
Not specifically addressed in previous plans	Wildlife habitat improvement projects would be implemented where necessary to stabilize or improve degraded or declining wildlife habitat conditions.			
Not specifically addressed in previous plans	Riparian habitat not in proper functioning condition would be restored to proper functioning condition. Restoration efforts would emphasize use by several migratory birds, bat species, amphibians, fish, reptiles, and other special status species. These areas would be closed to motorized use or vehicular traffic.	Riparian habitat not in proper functioning condition would be restored to proper functioning condition. Restoration efforts would emphasize use by several migratory bird and bat species. These areas would be open for public access.	Riparian habitat not in proper functioning condition would be restored to proper functioning condition. Restoration efforts would emphasize use by several species. These areas would be closed or seasonally restricted to motorized use or vehicular traffic during the seasons when the special status species habitats are used.	BLM would manage for proper functioning condition within riparian areas and springs, but where hydrological modifications and soil conditions prohibits proper functioning condition, a desired plant community would be defined and managed appropriately (see Maps 2-40, 2-44, and 2-45).
Not specifically addressed in previous plans	Reintroductions, transplants, release of rehabilitated native species, and supplemental stockings of wildlife populations will be carried out in collaboration with federal and state wildlife agencies within suitable habitat to: 1) restore, enhance, maintain current populations, distributions, and/or genetic diversity; 2) conserve or recover species that are in danger of becoming listed; and/or 3) restore or enhance native wildlife diversity and distribution and 4) release rehabilitated wildlife. Species that could be reintroduced, transplanted, or augmented include, but are not limited to			

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	<p>rehabilitated wildlife, threatened and endangered species (see table 3-3), special status species (see table 3-4) pronghorn, desert bighorn sheep, mountain lions, burrowing owls, other raptors, reptiles, mule deer, other game species, fish, and frogs.</p> <hr/> <p>All new and existing range improvements on public lands would allow for wildlife passage or escape, in compliance with BLM standards. Wildlife escape devices would be installed on all new and existing water tanks and/or troughs.</p> <hr/> <p>Construction sites for wind turbines, power lines, telecommunication, towers, solar power sites, and any other new technology, etc., would conform with guidelines developed by USFWS to minimize impacts to wildlife species, particularly migratory birds and bats.</p>			
Bat populations were not addressed in previous plans	<p>Abandoned mines would be examined to determine species utilization prior to deciding on the method of mine closure. Bat-friendly mine closures would be an intermediate measure for protecting bat maternity roosts, lek sites, and year-round use by bat colonies. Management and protection of the quantity and quality of foraging habitat surrounding important bat colonies would be achieved to the fullest extent possible.</p>			
Bat populations were not addressed in previous plans.	<p>Existing quality and quantity of wash vegetation would be maintained within 5 miles of an established bat species, especially special status bat species colonies (e.g., cave myotis [<i>Myotis velifer</i>], California leaf-nosed bat [<i>Macrotus californicus</i>]).</p> <p>The Bat Cave north of Lake Havasu City would be protected.</p>	<p>Integrity of wash vegetation would be maintained within 1 mile of an established bat species; especially, special status bat species colonies (e.g., cave myotis [<i>Myotis velifer</i>], California leaf-nosed bat [<i>Macrotus californicus</i>]).</p>	<p>The natural existing quality and quantity of vegetation would be maintained within a wash to the extent possible where there is an established bat species colony.</p> <hr/> <p>The Bat Cave north of Lake Havasu City would be protected and managed to the extent possible.</p>	

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not specifically addressed in previous plans	Density/distribution of wildlife waters throughout the planning areas would be maintained, improved, and/or increased to sustain and enhance wildlife populations across their range. All existing, functioning wildlife waters would be maintained or improved as necessary to maintain the presence of perennial water for wildlife. New wildlife waters may be constructed when necessary to maintain, restore, or enhance native wildlife populations and for wildlife distributions. Administrative motorized access by federal and state agencies to wildlife water facilities for maintenance or repair, research, observations, and supplemental water hauling would be allowed, subject to	Distribution of wildlife waters throughout the planning areas would be maintained to sustain and enhance wildlife populations across their range. All existing wildlife waters would be maintained or improved as necessary to maintain the presence of perennial water for wildlife. New wildlife waters, including in new locations, may be constructed if necessary to replace old wildlife waters, restore, or enhance native wildlife populations and for improving wildlife distributions	Distribution of wildlife waters throughout the planning areas would be maintained and improved to sustain and enhance wildlife populations across their range. All existing, functioning wildlife waters would be maintained or improved as necessary to maintain the presence of perennial water for wildlife. Administrative motorized access by federal and state agencies to wildlife water facilities for maintenance or repair, research, observations, and supplemental water hauling would be allowed, subject to site-specific analysis in non-motorized designations.	Distribution of wildlife waters throughout the planning areas would be maintained to sustain and enhance wildlife populations across their range. All existing wildlife waters would be maintained or improved as necessary to maintain the presence of perennial water for wildlife. New wildlife waters, including in new locations, may be constructed if necessary to replace old wildlife waters, restore, or enhance native wildlife populations and for improving wildlife distributions

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	site-specific analysis in non-motorized designations.			
Not specifically addressed in previous plans	Water developments for purposes other than wildlife would include design features that ensure safe and continued access to water by wildlife on year-round basis. If it is not feasible to provide water on a year-round basis, a determination will be made whether to design the feature for wildlife access.			
	Within wildlife corridors construction of overpasses, underpasses, culverts, and all fences on public lands would be built to allow for wildlife passage, unless the fence is specifically constructed for directing or excluding wildlife from locations for the protection of the wildlife (e.g., desert tortoise fence along a highway, directing wildlife to a corridor for safe highway crossing, etc.). Any existing fences not specifically constructed for directing wildlife that obstructs wildlife movements would be brought into compliance with BLM fence standards.			
<p><i>The following decision is derived from the 1987 YRMP and is applicable only to the lands covered by that plan:</i></p> <p>Collection of small quantities of plant material for non-commercial recreation, hobby, or landscaping purposes would be permitted, except that the collection and possession of ironwood at any one time would be limited to three pieces with an approximate weight not to exceed 10 pounds.</p>	All plant, seed, and other plant material collection would be prohibited, except for educational, scientific, and/or Native American uses.	Removal of state-listed protected plants would be in accordance with state law and would only be authorized through state permit. Additional restrictions would include: collection within a sample population would not exceed 20% (Way et al. 2002) of any one species, and collection of dead and down ironwood and cactus skeletons under a state permit would be limited to an approximate combined weight not to exceed 10 pounds per year.		
Not specifically addressed in previous plans	Protection would be provided for the scaly sandplant (<i>Pholisma arenarium</i>) and fringe-toed lizard (<i>Uma scoparia</i>), which exists on sandy soil and edges of washes within the low dunes (325 to 820 feet) southeast of Parker, Arizona, by requiring all vehicles to remain on existing roads and trails within the range of this rare plant.			
Not specifically addressed in previous plans	Natural open space would be maintained for special status species (e.g., burrowing owls and other migratory species) in the planning for new facility development and these species would be considered when issuing leases for public lands.			

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not specifically addressed in previous plans	Fish habitat improvements in Lake Havasu would be maintained to sustain fish productivity by providing permanent escape cover and rearing habitat for young. Damaged artificial reef structures would be repaired if needed and replaced in the original location. This work would be accomplished cooperatively by the Lake Havasu Fisheries Partnership program.			
Not specifically addressed in previous plans	BLM would cooperate with other authorities in the recovery strategies found in the Management Plan for the Big-River Fishes of the Lower Colorado River Basin, as approved in 2005. <ul style="list-style-type: none"> Management strategies intended to contribute to and assist with basin-wide recovery of the bonytail chub, razorback sucker, and other endangered fishes of the Lower Colorado River would be adopted. 			
Aquatic habitat was not specifically addressed in previous plans.	A 300-foot no-wake zone would be provided in coves that are administered by BLM to protect the shore from erosion, prevent damage to riparian growth, and reduce noise to nesting wildlife.	No additional no-wake zones would be established.	No-wake zones would be recommended as needed, to protect the shore from erosion, prevent damage to riparian growth, and reduce noise to nesting wildlife and fish habitat.	
Not specifically addressed in previous plans	Monkey Head, the Needles Revegetation Site, Beale Slough, Standard Wash, and the Colorado River Nature Center Riparian Areas would be expanded in the future (see Map 2-45).	Monkey Head, the Needles Revegetation Site, Beale Slough, Standard Wash, and the Colorado River Nature Center Riparian Areas would be maintained in the future (see Map 2-45).	Monkey Head, the Needles Revegetation Site, Beale Slough, Standard Wash, and the Colorado River Nature Center Riparian Areas would continue to be restored to proper functioning condition (see Map 2-45).	
Not specifically addressed in previous plans	Specifically, vehicular access within the Lake Havasu Aubrey Hills to retrieve game within this closure	Exceptions may be granted to licensed bighorn sheep hunters with tags for specific bighorn sheep hunts to	Vehicular access within the Lake Havasu Aubrey Hills to retrieve game would not be allowed.	

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	area would not be allowed.	allow vehicular access on approved administrative roads within the Lake Havasu Aubrey Hills only to retrieve game within this closure area.		
Not specifically addressed in previous plans	BLM would coordinate with appropriate interests, MSCP, and jurisdictions to create backwaters along the Colorado River and tributaries to increase native aquatic species habitat availability and diversity.			
	BLM would coordinate with Parker Strip interests and other agencies to enhance the sport fishery below Parker Dam through the development of both aquatic and bank habitat improvements.			
<i>The following decisions are derived from the 1995 KRMP and are applicable only to the lands covered by that plan:</i>	At a minimum, BLM would follow the management guidelines in the Bald Eagle Conservation Assessment Strategy.			
Prohibit camping, hiking, and off-highway vehicles within 0.25 mile of a bald eagle nest during breeding season (January 1 to June 1).	The following restriction in three buffer zones around all known nest would protect breeding attempts from adverse impacts: Buffer Zone 1: 500-foot radius around the nest. During breeding season – December 1 to June 30: No activity occurs around all known nests. During non-breeding season – July 1 to November 30: No activity would be permitted that would permanently change the landscape.			
Prohibit helicopter flights within 2 miles of active aeries during the breeding season (January 1 to June 1).	Buffer Zone 2: 500- to 1,000-foot radius around the nest. During breeding season – December 1 to June 30: Limited human activity. During non-breeding season – July 1 to November 30: No activity should permanently change the landscape.			
Prohibit road development within 2 miles of a bald eagle aerie.	Buffer Zone 3: 1,000- to 2,500-foot radius around the nest. During breeding season – December 1 to June 30: No activity should permanently change the landscape.			

Table 2-30. Biological Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	During non-breeding season – July 1 to November 30: Maintenance activities such as upkeep of existing buildings and roads can occur, but no activity should permanently change the landscape.			

Administrative Actions

- Wildlife habitat improvement projects would be implemented where necessary to stabilize or improve unsatisfactory or declining wildlife habitat condition. These projects would be identified through habitat management plans (under the Sikes Act), Inter-agency cooperative resource management plans (e.g., AGFD, CDFG, USFWS plans, etc.), and/or interdisciplinary coordinated resource management plans (e.g. ACEC, Wilderness).
- Acquisition of non-federal lands would be prioritized based on the potential to enhance the conservation and management of threatened or endangered species habitat, riparian habitat, desert tortoise habitat, key big game habitat, or improve the overall manageability of wildlife habitat.
- Based on changes in species density and/or habitat quality Sonoran desert tortoise habitat would be compensated in accordance with the *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona 1996* or future updates.
- All riparian areas including springs within the WHAs would be assessed to achieve proper functioning condition or desired plant community composition for native species (see Maps 2-40, 2-44, and 2-45).
- BLM would cooperate on a landscape basis with other authorities to educate the community to the risks to the environment from invasive and noxious species. In cooperation with other authorities BLM would research the means of control, monitor the resources affected, and implement control actions when needed. Riparian, wetland areas, shoreline, and all springs (see Map 2-44 and 2-45) would be evaluated and invasive or noxious species would be eradicated if possible. Areas from which the invasive or noxious species are removed would subsequently be re-vegetated with suitable bank-stabilizing species.
- To help stop the spread of invasive or noxious weeds, BLM would provide educational material to equestrian users on the use of certified weed-free hay, straw, pellets, hay cubes, and processed grains.
- BLM would cooperate with other agencies to actively manage, protect, and/or improve special status species habitat to maintain and/or increase populations to achieve common goals and objectives. Wildlife habitat, both aquatic and terrestrial, would be managed in cooperation with the state and federal wildlife agencies and other interested parties to conserve or improve the habitat of all sensitive species, all native species, and those resident species that have recreational value.

- BLM would participate in a coordinated effort to develop a scientific based inventory and evaluation process to periodically identify species density and to possibly reevaluate desert tortoise categories following the criteria as set forth in *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona 1996* or future updates.
- Areas classified as Category I, II, or III tortoise habitat would be reevaluated periodically by extensive scientific survey and the category could be updated by RMP amendment based on changes in species density.
- BLM would manage fish and wildlife habitats in cooperation with stakeholders to sustain diversified multiple-use habitat benefits in the planning area.
- Existing aquatic habitat improvements would be monitored periodically to document long-term durability and fishery results.
- BLM would work with local agencies and private entities through public outreach to minimize the risk of hazardous spills that occur on BLM lands. Operations to assure that the Colorado River meets water quality standards for fish and wildlife species would be actively reviewed.
- BLM would cooperate with other agencies to actively manage for native fish populations and habitat.
- BLM would coordinate and collaborate in the management of the Bill Williams River below Alamo Dam with neighboring landowners and appropriate state and federal agencies to sustain the river flow, vegetation and wildlife diversity, and wild and scenic outstandingly remarkable values.
- BLM would cooperate with appropriate interests to develop a cooperative watershed program to assure the use of best management practices in the watershed to safeguard against pollutant sediments degrading aquatic habitat conditions.

Management Common to All Alternatives

- BLM would quantify, file for, and protect water rights, including those for instream flows, on streams, springs, and other water sources important to wildlife, fish, and riparian values.

Fire Management

LHFO coordinates with other agencies to manage fire in accordance with the nationwide BLM fire policy. In 2003, the BLM Arizona State Office prepared the *Arizona Statewide Land Use Plan Amendment for Fire, Fuels and Air Quality Management (AZLUP)*, which incorporates new management direction coming from the National Fire Plan and the 2001 Federal Fire Policy. Fire and fuels management are integrated with other management activities to benefit both natural resources and multiple uses on lands administered by BLM within Arizona and the portion of California that falls within LHFO and Yuma Field Office boundaries. Management prescriptions for each of the alternatives described below reflect that plan.

Management Common to all Alternatives

Desired Future Conditions

Fire is recognized as a natural process in fire-adapted ecosystems and is used to achieve objectives for other resources.

Fuels in Wildland-Urban Interface areas are maintained at non-hazardous levels to provide for public and firefighter safety.

Prescribed fire activities comply with federal and state air quality regulations.

Each vegetation community is maintained within its natural range of variation in plant composition, structure, and function. Fuel loads are maintained below levels that are considered to be hazardous. Desired future conditions for vegetation communities are listed in Table 2-31.

Table 2-31. Desired Future Conditions and Land Use Allocations for Vegetation Communities (See Map 2-46)

Fire Specific Vegetation Community Type	Approximate Acreage	Desired Future Conditions	Land Use Allocation Category
Desertscrub 3,500-4,500-ft elevation	35,424	Adequate cover and a mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.	2

Table 2-31. Desired Future Conditions and Land Use Allocations for Vegetation Communities (See Map 2-46)

Fire Specific Vegetation Community Type	Approximate Acreage	Desired Future Conditions	Land Use Allocation Category
Desertscrub below 3500 ft elevation	1,264,562	Adequate cover and a mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.	2
Interior Chaparral	4,603	Adequate cover and a mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.	1
Riparian/Mesquite	41,963	Fire naturally maintains shrub cover while reducing annual grass cover, the invasion of woody plants such as juniper and piñon pine are controlled, and the average age of chaparral stands is reduced through controlled fire or mechanical treatment.	2

Land Use Allocations

As authorized in the AZLUP, BLM-administered public lands would be assigned to one of two Land Use Allocations for fire management. Within the LHFO area, the Harcuvar and Mohave mountain ranges fall into Allocation 1. The remainder of the LHFO falls within Allocation 2.

Description of Allocation 1

In Wildland Fire Use Areas (i.e., areas suitable for wildland fire use for resource management benefit), there are few or no constraints on use of fire to achieve resource objectives. Where conditions are suitable, unplanned and planned wildfire may be used to achieve desired objectives, such as to improve vegetation, wildlife habitat or watershed conditions, maintain non-hazardous levels of fuels, reduce the hazardous effects of unplanned wildland fires, and meet resource objectives. Where fuel loading is high but conditions are not initially suitable for wildland fire, mechanical, chemical, or biological means are used to reduce fuel loads below hazardous levels to meet resource objectives (includes Wildland-Urban Interface areas).

Description of Allocation 2

In Non-Wildland Fire Use Areas (i.e., areas not suitable for wildland fire use for resource benefit), mitigation and suppression are required to prevent direct threats to life or

property. Non-Wildland Fire Use Areas include those portions of the planning area where fire historically never played a large role in the development and maintenance of the ecosystem, as well as those areas where fire return intervals were very long. Also included are areas (including some Wildland-Urban Interface areas) where an unplanned ignition could have negative effects to the ecosystem unless some form of mitigation occurs. Mitigation may include mechanical, biological, chemical, or prescribed fire means to maintain non-hazardous levels of fuels, to reduce the hazardous effects of unplanned wildland fires, and to meet resource objectives.

The allocation of lands is based on the desired future condition of vegetation communities, ecological conditions, and ecological risks. The allocation of lands is determined by contrasting current and historical conditions and ecological risks associated with any changes. The condition class concept helps describe alterations in key ecosystem components such as species composition, structural stage, stand age, canopy closure, and fuel loadings. BLM Fire Management Plans will include the two allocations and will identify areas where the use of fire may be included. Also specified will be mechanical, biological, or chemical means to maintain non-hazardous levels of fuels and thereby reduce the hazardous effects of unplanned wildland fires and meet resource objectives. Fire Management Plans will also identify areas for exclusion from fire (through fire suppression), and chemical, mechanical, and/or biological treatments to achieve that end.

Management Actions

The following decision was derived from the 1987 YRMP and will be applicable to the entire planning area: Fires on or threatening public lands would be suppressed and fuels would be managed in accordance with BLM fire policy, agreements with other government agencies, approved modified fire suppression plans, relevant resource management plans, and the AZLUP. The structure of the fire management organization and fire management implementation guidance can be found in the Yuma-Lake Havasu Zone Fire Management Plan.

In areas suitable for fire where fuel loading is high and current conditions constrain fire use, BLM will emphasize prevention and mitigation programs to reduce unwanted fire ignitions, and use mechanical, biological, or chemical treatments to mitigate the fuel loadings and meet resource objectives.

In areas suitable for fire and where conditions allow, BLM will allow naturally ignited wildland fire, use prescribed fire, and employ a combination of biological, mechanical, and chemical treatments to maintain non-hazardous levels of fuels, reduce the hazardous effects of unplanned wildland fires, and meet resource objectives.

In areas suitable for fire, BLM will monitor existing air quality levels and weather conditions to determine which prescribed fires can be ignited and which, if any, must be delayed to ensure that air quality meets federal and state standards. If air quality approaches unhealthy levels, BLM will delay igniting prescribed fires.

BLM will implement conservation measures during fire suppression and all fire management activities as required, to minimize or eliminate adverse effects to federally

threatened, endangered, proposed, and candidate federally protected species and habitats, unless firefighter, public safety, protection of property, improvements or natural resources render them infeasible during a particular operation (Approved LUP and Decision record 9/28/2004). Conservation measures noted as recommended in Appendix M are not mandatory for implementation to help minimize effects to federally protected species and to provide consistency. Procedures within the Interagency Standards for Fire and Fire Aviation Operations 2003, including future updates, relevant to fire operations that may affect federally protected species or their habitat are incorporated here by reference.²

BLM will undertake education, enforcement and administrative fire prevention mitigation measures to reduce human-caused fires. Education measures will include various media information including a signing program, information as to the natural role of fire within local ecosystems, participation in fairs, parades, and public contacts. Enforcement will be accomplished by providing training opportunities for employees interested in fire cause determination. Administration includes expanded prevention and education programs with other cooperating agencies.

Firefighter and public safety is the first priority in every fire management activity. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources must be based on the values to be protected, human health and safety, and costs of protection (2001 Federal Wildland Fire Management Policy).

During fire suppression actions, resource advisors may be designated to coordinate concerns regarding federally protected species, and to serve as a liaison between the field office manager and the incident commander/incident management team. They will also serve as a field contact representative responsible for coordination with USFWS. The resource advisors will have the necessary information on federally protected species and habitats in the area and the available conservation measures for the species. They will be briefed on the intended suppression actions for the fire, and will provide input on which conservation measures are appropriate, within the standard constraints of safety and operational procedures. The incident commander has the final decision-making authority on implementation of conservation measures during fire suppression operations.

Because of the number of species located within the action area for the proposed RMP, combined with a variety of fire suppression and proposed fire management activities, conflicts may occur in attempting to implement all conservation measures for every species potentially affected by a particular activity. Implementing these conservation measures effectively would depend on the number of federally protected species and their individual life history or habitat requirements within a particular location that is being affected by either fire suppression or a proposed fire management activity. This would be particularly true for timing restrictions on fuels treatment activities if the ranges of several species with differing restrictions overlap, making effective implementation of the activity unachievable. Resource advisors (in coordination with USFWS), fire management officers or incident commanders, and other resource specialists would need to coordinate to determine which conservation measures would be implemented during a particular activity. If conservation measures for a species cannot be implemented, BLM would be required to initiate Section 7 consultation with USFWS for that particular activity.

In WAs, WSAs, and areas with wilderness characteristics according to wilderness plans or the RMP, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire Operations 2003) would be applied and coordinated with WA management objectives and guidelines.

Fire management activities along National Historic Trails will be conducted to assure no adverse effects occur to those resources and values identified in the legislation designating the trail.

ACECs and Back Country Byways are established in the RMP. The desired conditions and management prescriptions for these special areas will be considered in implementing fire management activities.

Fire Suppression Actions

The following constraints to fire suppression actions are common to all alternatives:

- Suppression tactics will be utilized that limit damage or disturbance to the habitat and landscape. No heavy equipment will be used (such as dozers) unless approved the field office manager.
- Use of fire retardants or chemicals adjacent to waterways will be accomplished in accordance to the Environmental Guidelines for Delivery of Retardant or Foam near Waterways (Interagency Standards for Fire and Aviation Operations pages 8–13).
- All known cultural resources will be protected from disturbance.
- In WAs, WSAs, and lands with wilderness characteristics according to LUPs, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire and Aviation Operations 2003) would be utilized and coordinated with WA management objectives and guidelines.
- The general and species-specific conservation measures listed in Appendix D of the AZLUP (USDI-BLM 2004) will be implemented to the extent possible to minimize adverse effects to federally listed, proposed, or candidate species occurring within the action area.
- For fire suppression activities, a protocol for consultation has been developed as a part of the Biological Opinion for the AZLUP (USDI-BLM 2004). This programmatic consultation contains conservation measures and prescriptions for use in fire suppression activities. Emergency consultation should only be needed in the future if suppression actions fall outside of these prescriptions/measures. The Biological Opinion will outline coordination needs for emergency response actions that may affect a listed/proposed species and/or critical habitat.

The following protocol will apply:

BLM will contact the appropriate USFWS biologist as soon as practical once a wildfire starts and a determination is made that a federally protected species and/or its habitat could be affected by the fire and/or fire suppression activities. USFWS will work with BLM during the emergency response to apply the appropriate conservation measures. If conservation measures cannot be applied during the suppression activities, BLM will

need to consult after the fact on any suppression actions that may have affected the federally protected species or its habitat. If conservation measures are adhered to, then BLM will report on the actions taken and effects to the species and its habitat following the fire, but no further consultation on that incident will be required.

Visual Resource Management

Public lands have a variety of visual values. Because it is neither desirable nor practical to provide the same level of management for all visual resources, it is necessary to systematically identify and evaluate these values to determine the appropriate level of management. Visual management objectives are established in RMPs in conformance with the Land Use Allocations made in the plan. (BLM Manual 8400.07A)

Visual resource values are managed in accordance with VRM class objectives. VRM classes are allocated for all areas of BLM-administered land, based on an inventory of visual resources and management considerations for other land uses. VRM management classes may differ from VRM inventory classes, based on management priorities for land uses (see BLM Handbook H-8410-1). Once allocated in the approved RMP and Record of Decision, other resource uses and management activities would be managed to conform to applicable VRM objectives established in the approved RMP.

The following criteria were used in determining the potential VRM Class allocations for each RMP alternative:

- The overall management emphasis intended for each alternative.
- Recognize all applicable Special Area Designations and all Land Use Allocations as VRM classifications are applied.
- Assure that other management activities and land uses being provided for in a specific area may be achieved within the VRM Class objective being set, consistent with Special Area Designations and Land Use Allocations.
- Use of the least restrictive class that still achieves objectives to attain Desired Future Conditions.

Table 2-32. Visual Resource Management–Desired Future Conditions**Common to All Alternatives**

VRM Class I – The objective of this class is to preserve the existing character of the landscape. This class provides for the natural ecological changes; however, it does not preclude very limited management activity. The level of change of the characteristic landscape should be very low and must not attract attention.

VRM Class II – The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

VRM Class III – The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

VRM Class IV – The objective of this class is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Above descriptions of class objectives come from BLM Handbook H-8410-1, Visual Resource Inventory

Table 2-33. Visual Resource Management—Land Use Allocations in Acreage

Alternative 1 (No Action) as Shown in Map 2-47	Alternative 2 as Shown in Map 2-48	Alternative 3 as Shown in Map 2-49	Alternative 4 as shown in Map 2-50	Alternative 5 (Preferred) as Shown in Map 2-51
Class I				
120,600	246,500	120,600	179,200	179,150
Class II				
306,800	524,600	202,600	202,200	253,361
Class III				
363,600	207,900	620,100	568,700	520,949
Class IV				
572,300	384,300	420,000	413,200	409,840

Table 2-34. Visual Resource Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Common to All Alternatives				
Visual resource design techniques and best management practices would be used to mitigate the potential for short- and long-term visual impacts from other uses and activities				
Contrast ratings may be required for projects proposed on public lands that fall within VRM Class I, II, and III areas which have high sensitivity levels as identified through the VRM inventory. Contrast-rating procedures are described in Handbook H-8341-1 and outlined in the Typical Management Actions & Standard Operating Procedures section of this chapter.				
State Route 95				
NA	BLM would work with local communities and agencies to establish a scenic corridor on SR 95 from its junction with Interstate 40 to the Bill Williams River, a distance of approximately 40 miles, excepting areas within the city limits of Lake Havasu. The width of the scenic corridor would be 0.5 mile to either side of the paved shoulders of SR 95 (Map 2-48). Public lands within this scenic corridor would be managed to VRM Class II	BLM would not establish a scenic corridor.	BLM would protect the scenic quality in a corridor on each side of SR 95 from south of Lake Havasu City to the Bill Williams River, a distance of approximately 20 miles. The width of the corridor would be 0.5 mile to either side of the paved shoulders of SR 95 (Map 2-51) Public lands in this scenic corridor would generally be managed to VRM Class II or III objectives. Physical improvements to existing leases or activities such as ROWs would be managed per existing agreements.	

Table 2-34. Visual Resource Management–Management Actions

objectives. To meet Class II objectives, no new leases for commercial activities without prior visual modeling to assure compliance with Class II objectives would be permitted.

Wilderness Characteristics

BLM has authority under FLPMA Section 201 to inventory public land resources and other values, including characteristics associated with the concept of wilderness identified as naturalness, solitude, and primitive, unconfined recreation. Wilderness characteristics may be considered in land use planning when the BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance) and need (trend, risk), and are practical to manage (Instruction Memorandum No. 2003-275-Change 1). (See Appendix K.) BLM may allocate areas within the planning boundaries of this RMP to prescribe goals, objectives, and Management Actions that will maintain wilderness characteristics. BLM has evaluated citizen group proposals to identify lands with wilderness characteristics, and where valid, along with any additional lands that BLM recognizes as having wilderness characteristics, those lands are considered in this RMP.

The FLPMA Section 603 “non-impairment standard” or Interim Management Policy for Lands under Wilderness Review will not be applied to management of wilderness characteristics. Additionally, wilderness characteristics will not be managed as designated wilderness under the Wilderness Act of 1964.

Table 2-35. Wilderness Characteristics–Desired Future Conditions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not addressed in previous plans	<p>The following wilderness characteristics would be maintained or enhanced where lands are allocated:</p> <p><u>Naturalness</u> – Lands and resources exhibit a high degree of naturalness when affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. Naturalness attributes may include the presence or absence of roads and trails, fences, wildlife facilities and other improvements; the nature and extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats. Wildlife populations and habitat are recognized as important aspects of the naturalness and will be actively managed.</p> <p><u>Solitude</u> – Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare or infrequent, where visitors can be isolated, alone or secluded from others.</p> <p><u>Primitive and Unconfined Recreation</u> – Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.</p>			

Table 2-36. Wilderness Characteristics–Land Use Allocations

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not addressed in previous plans	197,821 acres (see Map 2-52)	0	41,590 acres. (See Map 2-53.)	

Table 2-37. Wilderness Characteristics–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not addressed in previous plans	Use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations would be allowed for emergency purposes.	NA	Use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations would be allowed for emergency purposes.	
Not addressed in previous plans	The administrative use of motorized equipment would be minimized for natural and cultural resource management. Such use would be authorized only when it is determined use of such equipment is appropriate and consistent with management prescriptions for the area.	NA	The administrative use of motorized/mechanized equipment for natural and cultural resource management would be allowed. Activities including but not limited to, water supplementation, collar retrieval, and capture/release of wildlife, maintenance/repair and reconstruction or construction of wildlife waters.	

Table 2-37. Wilderness Characteristics–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
Not addressed in previous plans	Surface-disturbing activities or the permanent placement of structures would not be allowed, including but not limited to range improvements, water catchments, roads, trails, and fencing, unless required by law.	NA	New structures, including roads or trails, could be authorized to protect public safety, cultural sites, wildlife, ecological conditions, or as required by law.	Surface-disturbing activities or the permanent placement of structures would be allowed only when substantially unnoticeable in the landscape, subject to criteria outlined below. ¹
Not addressed in previous plans	Convert, where appropriate, closed vehicle routes for use as bicycle, equestrian, or hiking trails.	NA	Develop new hiking and equestrian trails, as appropriate.	Develop and maintain recreation facilities only when compatible with maintaining wilderness characteristics or when needed to protect resources or provide for public safety.
Not addressed in previous plans	Maintenance of existing facilities would be allowed.	NA	Maintenance of existing facilities would be allowed.	
Not addressed in previous plans	At time of renewal of any existing rights-of-way, BLM would discuss with the grant holder the possibility of relocating the right-of-way outside of lands allocated to maintain wilderness	NA	Decrease the visual effect of facilities on naturalness or scenic resources, when the opportunity arises, during reconstruction, replacement, or major maintenance.	

Table 2-37. Wilderness Characteristics–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	characteristics.			
Not addressed in previous plans	Vending operations and concession leases would be prohibited.	NA	Commercial recreation, vending operations, and concession leases would be allowed when such activities conform to to land use plan objectives, desired recreation settings, social and managerial settings, and VRM classes.	Vending operations and concession leases would be prohibited.
Not addressed in previous plans	Public lands within wilderness characteristics allocations will be retained in public ownership	NA	Public lands within wilderness characteristics allocations will be retained in public ownership	
Not addressed in previous plans	Acquire State and private inholdings from willing sellers whenever practicable, within wilderness characteristics allocations	NA	Acquire State and private inholdings from willing sellers whenever practicable, within wilderness characteristics allocations	
Not addressed in previous plans	Recreational or hobby collecting of mineral specimens when conducted without location of a mining claim and limited to	NA	Recreational or hobby collecting of mineral specimens when conducted without location of a mining claim and limited to hand collection and detection equipment may be allowed.	

Table 2-37. Wilderness Characteristics–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	hand collection and detection equipment may be allowed.			
Not addressed in previous plans	Existing mineral leases represent a valid existing right, dependent upon the specific terms and conditions of the lease. Existing leases will be regulated to prevent unnecessary or undue degradation.	NA	Existing mineral leases represent a valid existing right, dependent upon the specific terms and conditions of the lease. Existing leases will be regulated to prevent unnecessary or undue degradation.	
Not addressed in previous plans	Any new mineral leases would be issued with a no surface occupancy stipulation	NA	Any new mineral leases would be issued with a no surface occupancy stipulation	Mineral leases would be authorized on wilderness characteristics allocations when there would be no lasting impacts to solitude, unconfined recreation, and naturalness.
Not addressed in previous plans	Do not authorize sales of mineral materials	NA	Mineral material removal would only be authorized on wilderness characteristics allocations when there would be no lasting impacts to solitude, unconfined recreation, and naturalness.	
Not addressed in previous plans	Existing livestock grazing operations and support facilities are allowed to continue.	NA	Existing livestock grazing operations and support facilities are allowed to continue.	
Not addressed in previous plans	During fire suppression	NA	During fire suppression operations, minimum	

Table 2-37. Wilderness Characteristics—Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	operations, minimum impact suppression techniques would be used.		impact suppression techniques would be used.	
Not addressed in previous plans	Prescribed fires are allowed in conformity with a fire management plan so long as it is consistent in improving or maintaining the area's wilderness characteristics.	NA	Prescribed fires are allowed in conformity with a fire management plan so long as it is consistent in improving or maintaining the area's wilderness characteristics.	
Not addressed in previous plans	Vegetative manipulation to control noxious, exotic, or invasive plant species is allowed when there is no effective alternative and when the control is necessary to maintain the natural ecological balances within the area. Control may include manual, chemical, and biological treatment provided it would not cause adverse impacts to the wilderness characteristics.	NA	Vegetative manipulation to control noxious, exotic, or invasive plant species is allowed when there is no effective alternative and when the control is necessary to maintain the natural ecological balances within the area. Control may include manual, chemical, and biological treatment provided it would not cause adverse impacts to the wilderness characteristics.	
Not addressed in previous plans	Rehabilitation, stabilization,	NA	Rehabilitation, stabilization, reconstruction, and restoration work on prehistoric and historic sites	

Table 2-37. Wilderness Characteristics–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	reconstruction, and restoration work on prehistoric and historic sites and structures, as well as, excavations and surface collection may be specifically permitted if wilderness characteristics area maintained.		and structures, as well as, excavations and surface collection may be specifically permitted if wilderness characteristics area maintained.	

¹ Project consideration criteria: In general, projects with a small footprint that, across the area as a whole, would benefit maintenance of wilderness characteristics and are compatible with other resource objectives could be approved. Criteria to consider include:

- need for project to protect natural and cultural resources
- opportunity to manage and control public use or provide for public safety
- opportunity to restore or enhance natural, cultural, or visual resources and meet resource objectives
- long-term effect (positive or negative) on naturalness and resources
- ability to restore the use area after the project is completed to its previous natural state
- size and scale of project
- compatibility with the specified visual resource management zone and recreation settings
- loss of opportunity for solitude and primitive recreation
- potential for use to be accommodated outside of area.

When approved, projects would be completed using the least impacting methods that can be reasonably used to accomplish the project, considering resource effects as well as labor effort and cost, including designs for the facility to blend into the landscape, consideration of site selection and use of a low profile, design facilities that will require minimal maintenance, and use of best management practices to minimize surface and vegetation disturbance during construction. When completed, a restoration plan would be implemented to actively restore disturbed areas.

Administrative Actions

- Sites and areas affected by human activities would be reclaimed when such locales or sites are no longer needed by authorized land uses.

- At time of renewal of any existing ROWs, BLM would discuss with the grant holder the possibility of relocating the ROW outside of lands allocated to maintain wilderness characteristics. Remove facilities that are no longer used.
- Existing and new operations for locatable mining will be regulated using the 43 CFR 3809 regulations to prevent unnecessary and undue degradation of the lands.
- AGFD's use of motorized and mechanized equipment off designated routes is considered an administrative use and will be allowed in suitable locations (as agreed to by BLM and AGFD) for such purposes as the following:
 - ❑ water supplementation;
 - ❑ collar retrieval;
 - ❑ capture and release of wildlife;
 - ❑ maintenance, repair, and building or rebuilding of wildlife waters; and
 - ❑ discretionary surface-disturbing activities would be addressed as provided for in Management Actions.

Wild Horse and Burro Management

BLM is responsible for the management of wild horses and burros in accordance with the Wild Free-Roaming Horse and Burro Act of 1971, as amended 1976 and 1978. No viable wild horse herds were identified within the planning area during initial inventories following passage of the Wild Horse and Burro Act; therefore, this plan will only address wild burros. The management of wild burros on public land is accomplished at the minimum level necessary to assure the herd's free-roaming character, health, and self-sustaining ability in accordance with the Act. Herd areas (HAs) are limited to the geographic areas identified as being habitat used by wild burros at the time of passage of the Act (Map 2-54). Herd Management Areas (HMAs) are established on areas within HAs through the land use planning process, within which wild burros can be managed for the long term. Upon designation as an HMA, wild burros shall be managed as an integral component of the public lands on the basis of multiple uses and in a manner that maintains an ecological balance.

HMA boundaries depicted on Map 2-55 are based on information available in the current land use plans: *Lower Gila North Management Framework Plan* (1983), *1995 Kingman Resource Area Resource Management Plan*, *Yuma District Resource Management Plan* (1985), and the *Lower Gila North Grazing EIS* (1982). This RMP provides analysis of various HMA boundaries for wild burros in the planning area.

See Maps 2-55, 2-56, 2-57, and 2-58 for proposed HMA boundary changes by alternative. See Table 2-38 for Desired Future Conditions, Table 2-39 for Land Use Allocations, Table 2-40 for Management Actions, Table 2-41 for proposed initial Appropriate Management Levels (AML) for wild burros and Table 2-42 for proposed HMA acreages based on the boundary changes by alternative.

Table 2-38. Wild Horse and Burro Management–Desired Future Conditions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<p><i>The following decision is derived from the 1983 LGNMFP and is applicable only to those lands covered by the LGNMFP:</i></p> <p>A viable, color-diverse burro population of 200 animals would be maintained in the Alamo HMA; however, burro numbers in the remaining herd areas (in the Lower Gila North Management Framework Plan Area) would be reduced to zero.</p>	<p>Viable, color-diverse burro populations would be maintained within the HMAs, while maintaining a thriving natural ecological balance with other resources and consistent with other management agencies' objectives (including wildlife, riparian and upland vegetation, recreation, and others).</p>			

Table 2-39. Wild Horse and Burro Management–Land Use Allocations

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<p><i>The following decision is derived from the 1987 YRMP and is applicable only to those lands covered by the YRMP:</i></p> <p>Wild horses and burros would continue to be managed in accordance with the herd plans. Excess animals would be removed as necessary to protect forage resources.</p>	<p>In accordance with the Wild Free-Roaming Horses and Burros Act, non-BLM administered lands including the Alamo Wildlife Area, would be excluded from HMAs. These lands would be excluded from determinations of Appropriate Management Level (AML) for burros within the HMA. Wild burros that use non-BLM lands as part of their habitat remain protected under the Wild Horse and Burro Act; therefore, any removal actions remain the responsibility of BLM.</p> <p>The California side of the Havasu HMA (Havasú-CA HMA) would be managed in accordance with the Northern and Eastern Colorado Desert Coordinated Management Plan, which combines the Havasu-CA HMA with the Chemehuevi HMA. The combined area would be named Chemehuevi HMA and the initial AML would be 108 burros.</p> <p>Based on the manageability analysis found in Appendix L, wild burros will not be managed within the Little Harquahala HA boundaries; therefore, the HA will not be designated as an HMA and BLM does not intend to maintain a burro herd in this areas.</p>			
<p><i>The following decision is derived from the 1995 KRMP and is applicable only to those lands covered by the KRMP:</i></p> <p>Public lands within HMAs would be closed to domestic horses and burros, subject to immediate impoundment.</p>	<p>The Alternative 1 decision is not carried forward because it is a restatement of regulations. See the Code of Federal Regulations at 43 CFR 4710.5(b).</p>			
<p>The HMA boundary would be as shown on Map 2-55, and includes public land and those lands within the Alamo Wildlife Area.</p>	<p>Based on threatened and endangered species, riparian, and wildlife issues, the eastern Alamo HMA boundary would follow the western Palmerita Allotment boundary, excluding Alamo Wildlife Area, state, and private land.</p>	<p>The Alamo HMA boundary would be the same as the current HMA boundary from Alternative 1 plus HA lands to US 93, excluding the Alamo Wildlife Area, state, and private land. Management prescriptions for acceptable use levels would mitigate impacts to other</p>	<p>The eastern boundary of the Alamo HMA would run west from the southern boundary of the Alamo Wildlife Area, and then extend south from the state land block within the Palmerita Allotment, excluding the Alamo Wildlife Area, state, and private land. This demarcation would provide protection for threatened and endangered species, riparian, and wildlife issues.</p>	

Table 2-39. Wild Horse and Burro Management–Land Use Allocations

	resources.		
See above.	The area north of Lake Havasu City (west of SR 95 and east of the Colorado River) would be excluded from the Havasu HMA due to increasing population pressures, traffic concerns, and refuge conflicts.	The Havasu HMA boundary would continue to be the same as the HA boundary.	The area north of Lake Havasu City (west of SR 95 and east of the Colorado River) would be excluded from the Havasu HMA due to increasing population pressures, traffic concerns, and refuge conflicts.
Not addressed in previous plans	The initial AML levels would be adjusted based on the AMLs in the existing plans, the effects of boundary changes on the critical area, and existing monitoring data, which is the basis for the AML (see Table 2-41).		

Table 2-40. Wild Horse and Burro Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
<p><i>The following decision is derived from the 1987 YRMP and is applicable only to those lands covered by the YRMP:</i></p> <p>LHFO would not allow water developments for horses and burros that would expand their present herd areas.</p>	<p>This is not carried forward because BLM is prohibited by law to manage for wild burros outside of Herd Areas.</p>			
<p><i>The following decision is derived from the 1983 LGNMFP and is applicable only to those lands covered by the LGNMFP:</i></p> <p>Access to Alamo Lake would be maintained for the wild burro herd in the Alamo HMA. Free access for wild burros would be maintained to livestock-watering facilities in the Alamo HA.</p>	<p>Management of burros in the Alamo HMA would consider and assess the fish and wildlife conservation purposes and objectives for the Alamo Wildlife Area and the mandates of the Fish and Wildlife Coordination Act and the Endangered Species Act. The purposes and objectives for the Wildlife Area are outlined in AGFD's Alamo Wildlife Area Management Plan. AGFD has indicated that they will periodically (approximately every 5 years) review and possibly revise the plan. BLM would manage the burros in consultation with AGFD and USFWS consistent with the Alamo Wildlife Area Management Plan. Decisions concerning burros within the wildlife area would be consistent with federal laws and regulations, including the Wild Free-Roaming Horse and Burro Act of 1971, as amended 1976 and 1978.</p> <p>BLM does not intend to maintain burros that are outside of HMA boundaries but are within the HAs, nor maintain burros that are within HA that have not been designated as an HMAs. Burro use will occur within the Alamo Wildlife Area as outlined in the Alamo Wildlife Area Management Plan. Burro use may occur within the Santa Maria and Big Sandy corridors at levels developed cooperatively with AGFD and USFWS.</p> <p>BLM and AGFD would work collaboratively to provide wild burros access to water in Alamo Lake within specific areas of the Alamo Wildlife Area. Such access would be through agreement with AGFD and compatible with the goals and objectives of the wild life area as outlined in the Alamo Wildlife Area Management Plan.</p> <p>The level of burro use that is compatible and acceptable within the Alamo Wildlife Area would be cooperatively determined by AGFD and BLM and identified in the Alamo Wildlife Area Plan. BLM, AGFD, and USFWS would work together to establish key monitoring areas within sensitive riparian habitat. AGFD has indicated that they believe burro use would be compatible with the purposes of the wildlife area if annual bark stripping of live trees does not exceed 3 percent in any of the key areas. Additional upland monitoring sites and associated levels of acceptable use may be established within the Alamo Wildlife Area if resource damage by burros is observed in those areas.</p> <p>BLM would target burro removals in sensitive habitat areas and work with AGFD and USFWS to develop other management practices (if needed) such as the construction of fencing and alternative water sources to maintain levels of acceptable burro use within the wildlife area and to protect</p>			

Table 2-40. Wild Horse and Burro Management–Management Actions

Alternative 1 (No Action)	Alternative 2	Alternative 3	Alternative 4	Alternative 5 (Preferred)
	<p>sensitive habitats.</p> <p>BLM would evaluate all monitoring data, population data, and removal data every five years to assess whether the current AML continues to be appropriate for all HMAs (Havasu and Alamo). During the evaluation process, monitoring protocols and additional data needs would be analyzed. The evaluation would consider acceptable levels of use within the Alamo Wildlife Area. The evaluation and any adjustments in AML would be conducted in coordination and consultation with the AGFD and FWS. The AGFD has stated that they would periodically re-evaluate monitoring and acceptable burro use levels within the Alamo Wildlife Area. Every effort would be made to insure that these evaluations occur as concurrently and collaborative as feasible.</p>			
Construction of new structures within HMAs that would restrict burro movement would be limited or modified.	Any new fence construction within burro HMAs would not prevent burro access to water, unless the water has been developed for a specific purpose (such as wildlife catchments) that would make it necessary to exclude burros.			
Not addressed in previous plans.	<p>The guidelines and criteria for adjusting AML would include the use of monitoring data and be coordinated with affected resources and agencies.</p> <p>The simultaneous double-count technique (a census technique used by BLM Arizona and Arizona Game and Fish to estimate the wild burro population) developed in cooperation with AGFD will continue to be an acceptable method for estimating burro populations.</p>			
None identified	Burro information would continue to be included on informational kiosks such as those currently at Swansea)	Burro information would be included on bulletin boards and kiosks within HMAs.		
<i>Not addressed in previous plans.</i>	Burros would be removed from all areas where burro crossings cause a hazard.	The ADOT would be requested to create accessible underpasses on SR 95 during reconstruction activities for access by wild burros and wildlife to cross under the road.	Safety issues would continue to be handled as emergency/nuisance removals, receiving top priority to correct public safety concerns. These removals would be top priority. BLM would work with the Arizona Department of Transportation to create accessible safe crossings on state and federal highways during reconstruction activities for access by wild burros and wildlife to cross the road safely.	

Table 2-41. Initial Appropriate Management Levels for Wild Burros. (This is the number of wild burros to be managed within the HMA.)

HMA	Alt 1 (No Action)	Alt 2	Alt 3	Alt 4	Alt 5 (Preferred)
Alamo	200	160	200	160	160
Havasus-AZ	170	166	170	166	166
Havasus-CA/ Chemehuevi	150 ^a	108a	108a	108 ^a	108

Notes:

The initial AML levels would be adjusted based on the AMLs in the existing plans and the effects of boundary changes on the critical area, which is the basis for the AML.

^a Havasu-CA AML is shared with the Chemehuevi HMA in California.

Table 2-42. Acres within Herd Management Areas

HMA	Alt 1 (No Action)	Alt 2	Alt 3	Alt 4	Alt 5 (Preferred)
Alamo	277,017 ^a	182,576	288,263	189,237	189,237
Havasus-AZ	282,576	268,271	282,576	268,271	268,271
Havasus-CA/ Chemehuevi	25,945 ^b	24,318 ^b	24,318 ^b	24,318 ^b	24,318

Notes:

^a In Alternative 1, acres include the Alamo Wildlife Area.

^b Acres shown for Havasu-CA/Chemehuevi HMA include only the acres for the Havasu side in California.